E

S

 $\propto$ 

 $\supset$ 

0

S

 $\alpha$ 

Я

 $\cap$ 

۷

Z

# November 2001 ECONOMIC AND REVENUE FORECAST

FISCAL YEAR 2002 2ND QUARTER







November 2001 Economic and Revenue Forecast Washington State Department of Natural Resources December 12, 2001

# November 2001 ECONOMIC AND REVENUE FORECAST

FISCAL YEAR 2002 2ND QUARTER

prepared by
Bruce P. Glass
Economics Team Leader
Office of Budget and Economics
November 2001

Persons needing this information in an alternate format may call (360) 705-0582 or TTY (360) 902-1125



Accurate reproduction of information in this forecast is welcomed.

Acknowledgment of the source would be appreciated.

### **ACKNOWLEDGMENTS**

The quarterly revenue forecast is a collaborative effort. It is the product of information provided by private individuals and organizations, and DNR staff. Without their contributions this forecast could not be completed.

An absolutely critical component of this forecasting work are the purchasers of DNR timber. These busy individuals and companies willingly provide information that is essential to the process of estimating harvest volumes.

Many DNR staff also contribute to the forecast. Those persons who provide data or forecasts of revenue flows for their areas of responsibility make an especially significant contribution. These people include Wayne Hardy, Paul Penhallegon, Jon Luedecker, Ellis Vonheeder, Bob Suda, Rod Rennie, and Mark Savage. Also, other DNR staff have provided valuable and constructive feedback on drafts of this forecast report, and I thank Phil Aust, Quynh Nguyen, Jim Smego, and Bob van Schoorl for their comments in this regard.

I am grateful to Karath Fredrickson for her help and initiative in conducting the purchaser survey efficiently and effectively.

Bruce P. Glass December 12, 2001

## **Major points of the November 2001 forecast**

### ■ US Macroeconomic Conditions & Trends

- The US economy has entered recession.
- The Federal Reserve Bank (FRB) has reduced interest rates ten times so far in 2001 (by a total of 4.5% for the federal funds rate) in response to a slowing economy. Further reductions are possible before year end, however it is increasingly likely that the present phase of easing monetary policy is ending. While inflation is currently waning, the FRB will remain very sensitive to inflationary pressures, increasing interest rates as soon as it starts to detect these pressures.
- Growth of the US trade deficit is slowing, and the large deficit imposes an inflationary threat through currency depreciation.
- Rebound of a slowing economy rests to a great extent upon consumer confidence, which has been declining recently in the face of rising unemployment.
- Stock prices, typically a leading economic indicator, appear to have ceased their decline and begun rising.
- Blue Chip consensus estimates of real gross domestic product (GDP) growth for calendar year (CY) 2001 have decreased from 1.6% in September 2001 (immediately prior to the terrorist attacks of September 11, 2001) to 1.1% in November 2001. Real GDP growth of 1.1% is anticipated for CY 2002, down from a consensus estimate of 2.7% in September 2001.

# ■ Japanese Macroeconomic Conditions & Trends

- Japan continues to experience the severe deflationary pressures associated with recession. These pressures are exacerbated with slowing growth in the US economy as Japanese exports to the USA decline.
- The Bank of Japan is effectively operating a zero percent interest rate policy.
- Industrial and financial restructuring in the wake of the Asian financial crisis remains elusive.
- Consensus real GDP growth projections indicate negative growth is expected over the next two years (i.e., -0.8% and -0.7% for CY 2001 and 2002 respectively).

### ■ Implications of Macroeconomic Conditions for Forecast

- US housing starts are proving resilient, and remain at relatively high levels even though the economy likely has entered recession.
- US housing starts are likely to remain at or about 1.5 million/year (seasonally adjusted) in the near term--a relatively high level compared with prior years--before increasing as recent FRB interest rate reductions feed through into mortgage interest rates.
- Japanese housing starts are expected to remain flat for at least the next two years.
   Little substantive long-run recovery is expected given existing demographic trends (i.e., a high proportion of the population lies outside the highest household formation years).

(continued on page iv)

### (continued from page iii)

- Sold Timber Sale Volumes: Compared with the September 2001 forecast, sold timber sale target volume is down 39 mmbf (7%) to 542 mmbf in fiscal year ending June 2003 (FY 03), but are otherwise unchanged (Figure 1, Table 1).
  - Reduction in sold timber target volume in FY 03 reflects impacts of operational and policy constraints on preparing timber volume for sale.
  - Sold timber sales target volumes for FY 03 and subsequent years are provisional pending recalculation of the sustainable harvest.
  - Sold timber as at the end of September 2001 was 79 mmbf, out of a 480 mmbf target sold volume for FY 02.
- **Timber Sale Prices:** Compared with the September 2001 forecast, estimated timber prices are revised downward in FY 02 and upward in FY 05 (Figure 2, Table 1).
  - Softwood lumber prices have been declining from \$402/mbf in May 2001 to \$275/mbf in October 2001 (Random Lengths framing lumber composite price index).
  - Factors contributing to this price decrease include: (1) Slowing residential construction activity associated with the economy-wide slowdown; and (2) Increased imports of softwood lumber from Canada in the wake of the expiration of the Softwood Lumber Agreement (SLA) on March 31, 2001 (a flow now slowed with the imposition of a 19.31% penalty tariff and an antidumping duty regime).
  - Softwood log imports from Canada into the western USA have increased sharply over the last 1 to 2 years, largely as a consequence of trade policy restrictions placed on imports of Canadian softwood lumber into the USA. (Refer to the Appendix in the June 2001 forecast and the September 2001 forecast for more details.) These imported logs are tending to dilute purchaser interest in sales offered by the department, thereby depressing prices.
  - Outlook for timber sales prices: Seasonal changes aside, look for flat to only slightly increasing near-term prices. Tariffs and duties imposed on softwood lumber imported from Canada into the USA are expected to increase lumber prices and therefore housing costs in the USA in the short term (by perhaps as much as \$1,500 per house according the the National Association of Home Builders), their effects will be offset somewhat by the increased construction activity expected as the interest rate cuts resulting from FRB interventions take hold. More pertinent to the department however, is the likelihood that these duties will tend to be a drag on timber sales prices in the longer term, assuming continued depressed softwood lumber market conditions in Japan and the absence of a settlement to the softwood lumber trade dispute between Canada and the USA.

(continued on page v)

### (continued from page iv)

- **Timber Removal Volumes:** Compared with the September 2001 forecast, timber removal volumes are little changed from FY 02 through FY 04 (Figure 3, Table 1). Removal volumes are revised downwards by some 33 mmbf (7%) in FY 05, largely as a (lagged) consequence of the reduced target timber sales volume for FY 03.
  - Changed economic and market conditions have led to changes in purchasers' nearterm harvest intentions, i.e., purchasers now plan on harvesting volume deferred from the September and December quarters of FY 02 in subsequent quarters of FY 02 and beyond.
- Uncut Timber Inventory Under Contract: Compared with the September 2001 forecast, uncut timber under contract at the end of FY 05 is some 88 mmbf lower in volume terms, and about \$28 million lower in value terms.
  - Forecast-to-forecast decrease in volume and value of uncut inventory under contract at the end of FY 05 result from changes in sales volume and prices through the FY 02-05 period (see Table 1).
  - At the end of FY 07 uncut inventory under contract is estimated to be 798 mmbf, worth \$286 million (average of \$359/mbf), up from 627 mmbf, worth \$193 million (average of \$308/mbf) at the end of the September guarter of FY 02.
- **Timber Removal Prices:** Compared with the September 2001 forecast, timber removal prices are forecast to be virtually unchanged through the forecast period (Figure 4, Table 1).
- **Timber Removal Revenues:** Compared with the September 2001 forecast, timber removal revenues are up about 2% in FY 02, 1-2% lower for FY 03 and FY 04, and nearly 7% (\$13 million) lower in FY 05 (Figure 5, Tables 1 & 2).
  - Reduction in forecast revenues is largely a consequence of reduced estimates of timber sales prices in FY 02, and a reduced sold timber sale volume target for FY 03.
- Non-timber Upland Revenues: Compared with the September 2001 forecast, forecast estimates of non-timber upland revenues are 2-3% down (\$0.5-0.6 million/year) on levels previously estimated (Figure 6, Table 2).
  - Reduced revenues estimates result from reductions in anticipated revenues from mineral sales and royalties, since the department has traded out of a gravel pit operation (i.e., the Segale pit).

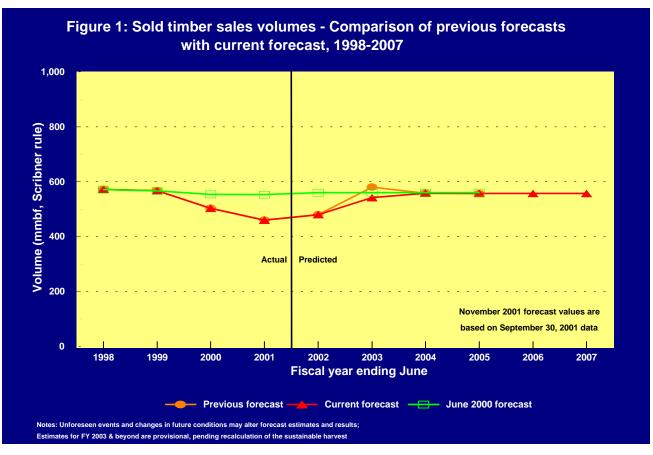
(continued on page vi)

### (continued from page v)

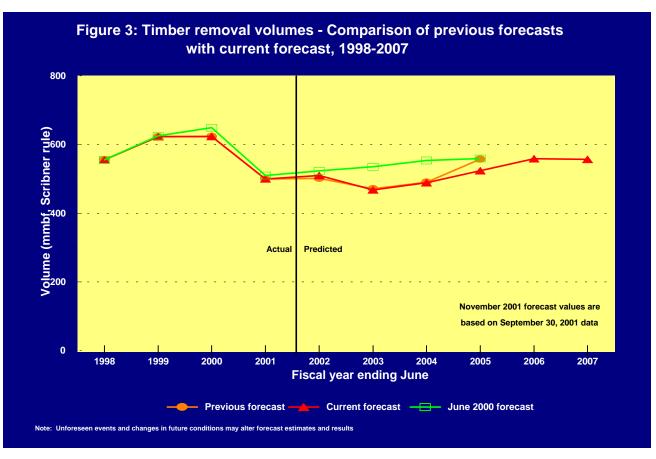
- Aquatic Revenues: Compared with the September 2001 forecast, aquatic revenues are about 1% down (\$0.1-0.2 million/year) on levels previously estimated (Figure 7, Table 2).
  - Forecast revisions reflect re-estimation of underlying forecast model based on an expanded data set.
  - Forecast aquatic revenues continue to assume future revenues will follow trends
    exhibited by past revenue receipts, and do not explicitly take into account factors
    with potentially major revenue impacts (e.g., revisions to geoduck harvest levels, and
    biological factors such as green crab infestation and paralytic shellfish poisoning).
- Total Revenues: Compared with the September 2001 forecast, total revenues are forecast to be about \$2 million higher in FY 02, about \$3 million lower in FY 03 and FY 04, and as much as \$13 million lower in FY 05 (Figure 8, Table 2), largely as a result of reduced forecast estimates of: (a) timber removal revenues, largely due to a reduced target timber sales volume in FY 03 (542 mmbf, down from 580 mmbf) and a reduced timber sales price forecast for FY 02; (b) reduced estimates of revenues from non-timber sources (i.e., minerals sales and royalties).
  - Excluding Trust Land Transfers, total revenues decline through FY 02 from \$203
    million in FY 01 (provisional) to about \$191 million in FY 03, before rising through FY
    04-06 to \$242 million in FY 07.
  - Beneficiary and management revenues follow the same trend as total revenues (Figures 9 & 10, Tables A2 and A3).
  - Revenues to trust beneficiaries from the resource transfer component of Trust Land Transfers are reported but not estimated in the forecast, and amounted to \$56.1 million in FY 00 & 01 (provisional). They are estimated to reach about \$40.0 million over FY 02 & 03, i.e., \$25.0 million in FY 02 and & \$15.0 million in FY 03 (Footnote 1, Table A2).

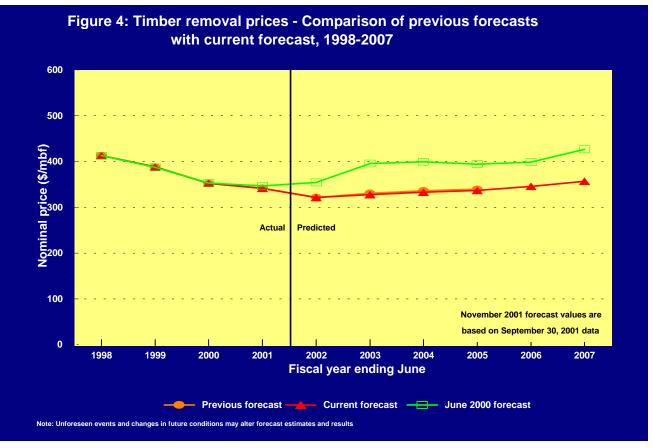
### Some Uncertainty Caveats:

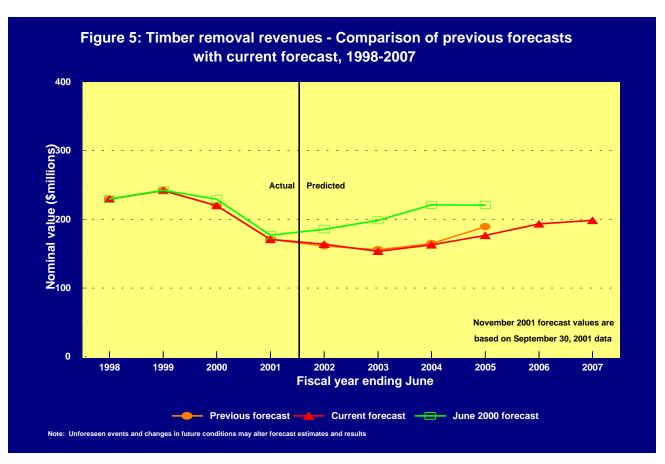
- Impacts associated with recalculation of the sustainable timber harvest for DNR-managed trust lands are not included in this forecast; target timber sale volumes likely will change as a result of this recalculation from FY 03 onward.
- Market impacts of changes in timber supply from outside the Pacific Northwest region, e.g, foreign suppliers, softwood log imports from Canada.
- US-Canada timber trade regulation, and its impacts on sawtimber supply and price.
- Changing consumer preferences for timber in Japan, i.e., switch toward kiln-dried lumber in response to house construction performance standards and guarantees.
- Downturn in global economic conditions, and especially in the USA and in Japan.
- Budgetary changes arising out of the FY 2002 legislative session.

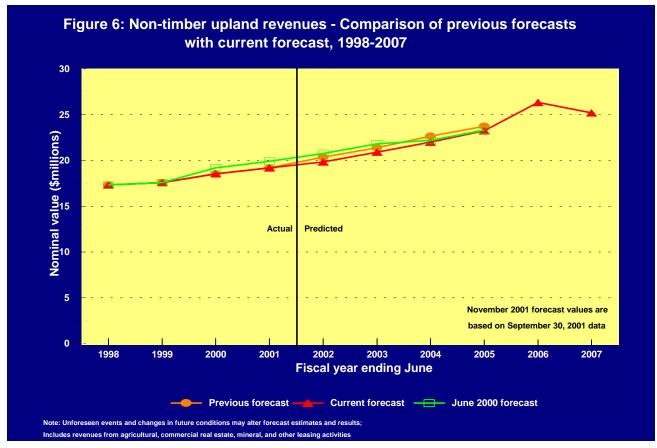


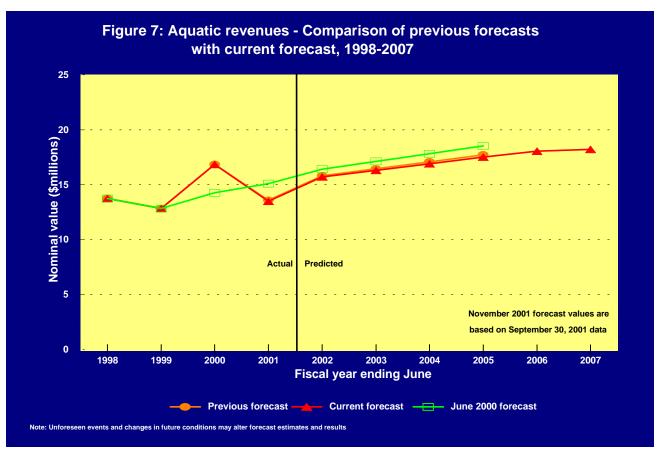


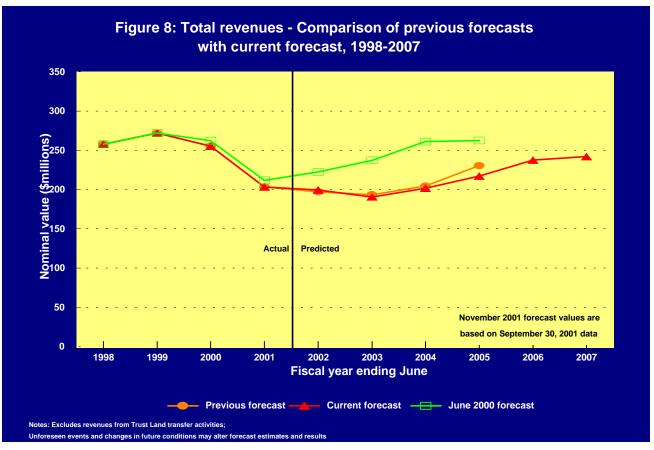


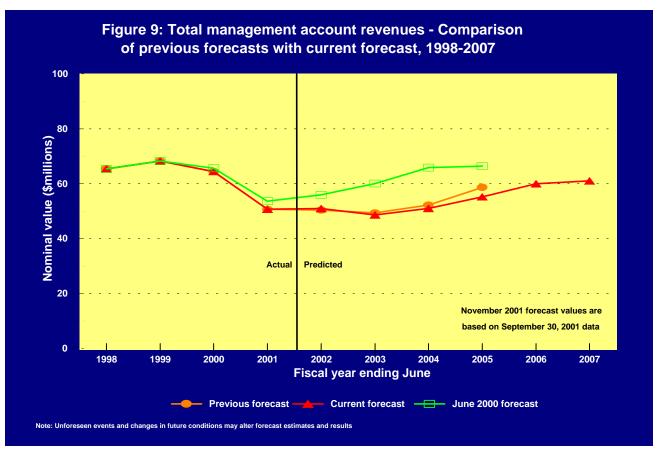












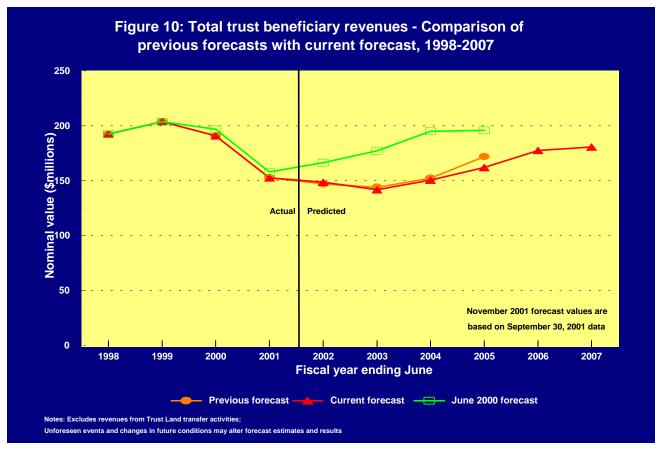


Table 1: Projected trust land timber sales, removals and revenues

Projected Projected Projected	\$57 557 557	524 559 557	\$176 5 \$193 \$198 F
2005 2006 2007	\$360 \$370 \$350	\$337 \$346 \$357	
Projected 2004	558 \$340	489 \$333	\$162.8
Projected	542	468	\$153.3
2003	\$350	\$328	
Projected	480	510	\$164 D
2002	\$310	\$321	
Actual FY 2002 to 9/30/01	79 \$286	167 \$321	# # # #
Preliminary	460	500	\$170.6
2001	\$305	\$341	
Actual	503	624	219.9
2000	341	353	
Fiscal year	Sold timber sales Volume (mmbf) Price (\$/mbf)	Timber removals Volume (mmbf) Price (\$/mbf)	Timber removal revenue (\$millions)

Change from previous forecast

Fiscal year	year	2000	Preliminary 2001	inary Change 11 since last quarter	Projected st 2002	Projected 2003	Projected 2004	Projected 2005	
Sold timber sales	Volume (mmbf) Price (\$/mbf)		0 <b>9</b> 0 (0)	79	0 (\$25)	(£ (£	- ⊊	0 \$10	
Timber removals Volume (mmbt) Price (\$/mbt)	Volume (mmbf) Price (\$/mbf)		0 😪		8 ₽	© <b>£</b>	( <del>)</del>	88	
Timber removal rev	venue (\$millions)	0:0	0.0 \$0.0		\$2.8	(\$2.4)	(\$2.0)	(\$12.6)	

	ed Projected 2007	.2 \$198.5	.5 \$17.1 .9 \$8.1	.1 \$18.2	0.0\$ 0.0	.6 \$241.9						
	Projected 2006	\$193.2	\$16.5 \$9.9	\$18.1	0:0\$	\$237.6	77	©.	6-	3)		Ģ
	Projected 2005	\$176.5	\$15.6 \$7.6	\$17.5	\$0.0	\$217.3	Projected 2005	(\$12.6)	(\$0.5) \$0.0	(\$0.2)	\$0.0	(\$13.4)
	Projected 2004	\$162.8	\$14.6 \$7.4	\$16.9	\$0.0	\$201.7	Projected 2004	(\$2.0)	(\$0.6) \$0.0	(\$0.2)	\$0.0	(9,79)
	Projected 2003	\$153.3	\$13.7 \$7.2	\$16.3	\$15.0	\$190.5	Projected 2003	(\$2.4)	(\$0.5) \$0.0	(\$0.1)	\$0.0	(£3.0)
	Projected 2002	\$164.0	\$12.8 \$7.0	\$15.7	\$25.0	\$199.5	Projected 2002	\$2.8	(\$0.5) \$0.0	(\$0.1)	\$0.0	600
	Actual FY 2002 to 9/30/2001	\$62.5	\$3.1 \$2.0	\$3.8	\$0.0	\$71.5	Change since last quarter	\$62.5	\$3.1 \$2.0	\$3.8	\$0.0	4715
2001	Preliminary	\$170.6	\$13.5 \$5.7	\$13.5	\$31.4	\$202.8	Preliminary 2001	\$0.0	\$0.0	(\$0.1)	\$0.0	(0.08)
ce (\$millions)	Actual 2000	\$219.9	\$12.4 \$6.1	\$16.9	\$24.7	\$255.3	Actual 2000	\$0.0	\$0.0	\$0.0	\$0.0	U U\$
Table 2: Projected trust land revenue by source (\$millions)	Fiscal year	Timber removal revenue	Agricultural and mineral revenue Commercial real estate revenue	Aquatic revenue	Trust land transfer (resource value)	Total revenue, excluding trust land transfer	Change from previous forecast Fiscal year	Timber removal revenue	Agricultural and mineral revenue Commercial real estate revenue	Aquatic revenue	Trust land transfer (resource value)	Total revenue, evoluding truet land transfer

Table A2: Projected trust revenues by fund and fiscal year, November 2001 forecast, 2000-2007 (\$millions)

Fiscal year	Actual 2000	Preliminary 2001	Actual 07/01/2001 to 09/30/2001	Projected 2002	Projected 2003	Projected 2004	Projected 2005	Projected 2006	Projected 2007
MANAGEMENT ACCOUNTS 041 RMCA - UPLAND 041 RMCA - AQUATIC 014 FDA	\$30.9 \$7.2 \$26.4	\$24.9 \$5.4 \$20.5	\$7.5 \$1.5 \$6.8	\$22.9 \$6.6 \$21.4	\$23.9 \$6.9 \$17.9	\$25.3 \$7.1 \$18.6	\$27.5 \$7.4 \$20.3	\$31.4 \$7.6 \$21.0	\$32.5 \$7.7 \$20.9
	\$64.4	\$50.7	\$15.8	\$50.9	\$48.7	\$51.0	\$55.2	\$60.0	\$61.1
CURRENT FUNDS 113 COMMON SCHOOL CONSTRUCTION 999 FOREST BOARD COUNTIES 001 GENERAL FILID	\$66.0 \$81.0 \$5.2	\$52.3 \$64.0 \$3.8	\$16.0 \$19.7 \$10.7	\$46.6 \$65.2 \$3.2	\$48.1 \$53.2 83.8	\$55.8 \$57.3 \$3.4	\$59.4 \$61.7	\$68.6 \$64.7 \$3.3	\$71.6 \$64.1
	\$0.3 50.5	\$1.1 \$0.6	\$0.3 \$0.3	\$1.2 \$0.6	\$1.3	\$1.5 \$0.8	\$1.6 \$0.8	\$1.0 8.00 8.00	\$1.8 80.0 0.0
042 CEP&RI 036 CAPITOL BUILDING CONSTRUCTION 0612365 NORMAL CONIL FINIT WANT TESTS SCHOOL	\$5.1 \$8.2 1.0	\$3.6 6.5 7.08	\$10.2 \$10.2 \$10.2	84.6 86.9 6.0 4.0	4.58 4.00 4.00 4.00	\$3.5 4.08 4.08	\$4.7 \$6.7 \$0.1	<b>84.8</b> 84.0 8.0 €	<b>84.8</b> 8.78 8.0.0
OTHER FUNDS	\$166.4	\$132.2	\$0.1	\$129.3	\$120.4	\$0.2	\$138.8	\$151.7	\$0.6
AQUATIC LANDS ENHANCEMENT ACCOUNT 02R AQUATIC LANDS	\$9.7	\$8.1	\$2.2	\$9.1	<b>\$</b> 9.4	8. 8.8	\$10.1	\$10.4	\$10.5
PERMANENT FUNDS  601 AGRICULTURAL COLLEGE  604 NORMAL SCHOOL PERMANENT  605 COMMON SCHOOL PERMANENT  606 SCIENTIFIC PERMANENT  607 UNIVERSITY PERMANENT	\$2.6 \$5.5 \$1.0 \$1.0	\$1.8 \$4.3 \$4.7 \$0.6 \$12.3 \$12.3	\$ 50.5 5.0.5 7.1.8 5.0.4 4.0.8	\$1.3 \$3.4 \$0.7 \$0.8 \$0.8	\$3.7 \$2.6 \$0.8 \$4.4 \$0.5 \$12.0	\$3.0 \$4.0 \$4.0 \$0.3 \$12.2	\$3.3.3 \$1.1.4 \$0.4 \$13.2	\$4.5 \$4.0 \$1.2 \$6.1 \$0.5 \$15.3	\$4.8 \$3.7 \$1.3 \$5.0 \$0.8
TOTAL TO TRUST BENEFICIARY FUNDS TOTAL ALL FUNDS	\$190.8 \$255.3	\$152.6 \$203.3	\$55.7 \$71.5	\$148.6 \$199.5	\$141.8 \$190.5	\$150.6	\$162.0 \$217.3	\$177.5 \$237.6	\$180.8 \$241.9

<sup>1 -</sup> Excludes interest and trust land transfer monies, and includes operating transfers. Trust Land Transfer monies amounted to \$37.3 million in FY 1994-95, \$21.8 million in FY 1998-99, \$56.06 million in FY 2000-01 (preliminary), and \$40.0 million (estimate) in FY 2002-03, payable to the Common School Construction Fund.

Upland RMCA does not include land bank transactions.
 Revenues reflect cash earnings from management activities only. Revenues from interest payments, fires assessments, permits. fees, etc. are not included.

Totals may not add due to rounding.
 Projected values are forecast estimates, and should be interpreted in conjunction with the accompanying forecast document. Unforeseen events and changes in future conditions may alter forecast estimates and results.

<sup>6 -</sup> Data for all years are cash estimates, and not directly comparable with accrual figures presented in DNR Annual Reports.

Table A3: Change from September 2001 to November 2001 forecast-Projected trust revenues by fund and fiscal year, 2000-2007 (\$millions)

Fiscal year	=	Actual 2000	Preliminary 2001	Projected 2002	Projected 2003	Projected 2004	Projected 2005	Projected 2006	Projected 2007
MANAGEI 041 014	MANAGEMENT ACCOUNTS 041 RMCA - UPLAND 041 RMCA - AQUATIC 014 FDA	\$0.0 \$0.0 \$0.0\$	0.0 <b>%</b> 0.0 <b>%</b> 0.0 <b>%</b>	\$0.2 (\$0.1) \$0.4 \$0.6	(\$0.5) (\$0.1) (\$0.1) (\$0.1)	(\$1.7) (\$0.1) \$0.6 	\$2.0 (\$6.10) (\$1.3) (\$1.3)	(\$0.2) (\$0.1) \$0.1	(4.15) (4.15) (4.12)
CURRENT FUNDS 113 COMM 939 CENER 348 UNIVE 347 WSU B 042 CEP&F 036 CAPIT 061/3/5/6 NORM	T FUNDS COMMON SCHOOL CONSTRUCTION COMMON SCHOOL CONSTRUCTION GENERAL FUND UNIVERSITY BOND RETIREMENT WSU BOND REPAYMENT CEP&RI CAPITOL BUILDING CONSTRUCTION NORMAL (CWU, EWU, WWU, TESC) SCHOOL OTHER FUNDS			6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	\$6.54 \$6.04 \$0.04 \$0.05 \$0.05 \$0.00 \$0.00 \$0.00 \$0.00	\$\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	<b>%%%%%%%%%%</b> 6.000000000000000000000000000000000000	\$\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$2 \$2 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$6
AQUATIC 02R	AQUATIC LANDS ENHANCEMENT ACCOUNT 02R AQUATIC LANDS	\$0.0	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.2)
PERMANI 601 604 605 606 607	PERMANENT FUNDS  801 AGRICULTURAL COLLEGE  804 NORMAL SCHOOL PERMANENT  805 COMMON SCHOOL PERMANENT  806 SCIENTIFIC PERMANENT  807 UNIVERSITY PERMANENT	0.00		66.66.89 66.06.89 66.00.00.00 66.00.00.00.00	(\$0.4) (\$0.2) (\$0.1) (\$0.1) (\$0.1)	\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	888888 688888 688888 788888	\$6.00 (2.00 (2.00 (4.00) (1.00)	888 884 644 864 864 864 864 864 864 864
	TOTAL TO TRUST BENEFICIARY FUNDS TOTAL ALL FUNDS	\$0.0	(\$0.1)	\$1.6 \$2.2	(\$2.3) (\$3.0)	(\$1.7) (\$2.9)	(\$9.9)	\$0.7	(\$2.3) (\$3.5)

<sup>1 -</sup> Excludes interest and trust land transfer monies, and includes operating transfers. Trust Land Transfer monies amounted to \$37.3 million in FY 1994-95, \$21.8 million in FY 1998-99, \$56.06 million in FY 2000-01 (preliminary), and \$40.0 million (estimate) in FY 2002-03, payable to the Common School Construction Fund.

Upland RMCA does not include land bank transactions.
 Revenues reflect cash earnings from management activities only. Revenues from interest payments, fires assessments, permits. fees, etc. are not included.

Totals may not add due to rounding.
 Projected values are forecast estimates, and should be interpreted in conjunction with the accompanying forecast document.
 Unforeseen events and changes in future conditions may alter forecast estimates and results.
 Data for all years are cash estimates, and not directly comparable with accrual figures presented in DNR Annual Reports.